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CLAIMS

1. A syntactic polyolefin composition for pipe coating, characterised in that the composition
5 comprises a β -nucleated propylene polymer comprising 0.0001-2.0 weight% of a β -nucleating agent and microspheres, said composition having a melt flow rate (MFR₂; ISO 1133, condition D) at 230°C/2.16kg in the range of 0.05-30 g/10 min and in that the composition has an
10 elongation at break of at least 3%.

2. A syntactic polyolefin composition according to claim 1, characterised in that said composition has a melt flow rate (MFR₂; ISO 1133, condition D) at 230°C/2.16kg in the range of 0.5-10 g/10 min and preferably
15 in the range of 1.0-5 g/10 min.

3. A syntactic polyolefin composition according to claim 1 or 2, characterised in that said composition has an elongation at break of >5% and preferably >10%.

20 4. A syntactic polyolefin composition according to any one of claims 1 to 3, characterised in that the β -nucleated propylene polymer is a (co)polymer which comprises at least 90.0 weight% of propylene and up to 10.0 weight% of α -olefins with 2 or 4 to 18 carbon
25 atoms, and that the propylene polymer has a melt flow rate of 0.1-8 g/10 min at 230°C/2.16 kg.

5. A syntactic polyolefin composition according to any one of claims 1 to 4, characterised in that the composition further comprises a polyolefin
30 homopolymer having a melt flow rate of 100-1500 g/10 min at 230°C/2.16 kg.

6. A syntactic polyolefin composition according to any one of claims 1 to 5, characterised in that the amount of polyolefin is 0-20 weight%, preferably
35 15-20 weight%.

7. A syntactic polyolefin composition according to any one of claims 1 to 6, characterised in

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that the tensile modulus of the composition is at least 1500 MPa determined according to ISO 527.

8. A syntactic polyolefin composition according to any one of claims 1 to 7, characterised in that the compression strength at 20 MPa/80° determined according to ASTM D695, is > 10 MPa, preferably >15 MPa.

9. A syntactic polyolefin composition according to any one of claims 1 to 8, characterised in that the K-value of the composition is less than 0.190 W/m°K.

10. A syntactic polyolefin composition according to any one of claims 1 to 9, characterised in that the density of the composition is 500-850 kg/m³.

11. A syntactic polyolefin composition according to any of claims 1 to 10, characterised in that said microspheres are made of glass, ceramics, epoxy resin, phenolic resin or urea-formaldehyde resin.

12. A syntactic polyolefin composition according to any one of claims 1 to 11, characterised in that said microspheres are untreated microspheres.

13. A syntactic polyolefin composition according to any one of claims 1 to 12, characterised in that said microspheres have an outer diameter of 1-500 µm, preferably 5-200 µm.

14. A syntactic polyolefin composition according to any one of claims 1 to 13, characterised in that said microspheres are hollow.

15. A syntactic polyolefin composition according to any one of claims 1 to 14, characterised in that said microspheres are present in an amount of 10-50 weight%, preferably 20-30 weight% of the composition.

16. A method for the preparation of a syntactic polyolefin composition for pipe coating according to any one of claims 1-15, characterised in that microspheres are evenly distributed by melt mixing in a composition comprising a β-nucleated propylene polymer and microspheres, said composition having a melt flow

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rate at 230°C/2.16kg in the range 0.05-30 g/10min and in that the composition has an elongation at break of at least 3%.

17. A method according to claim 16, c h a r a c -
5 t e r i s e d in that said microspheres are added to the molten polymer.

18. A method according to claim 16 or 17,
c h a r a c t e r i s e d in that the composition is
compounded/homogenised and extruded as a coating on an
10 off-shore pipe in one continuous step.

19. A method according to claim 16 or 17,
c h a r a c t e r i s e d in that the composition is
pelletized in a first step and in a subsequent step
extruded as a coating on an off-shore pipe.

15 20. An off-shore pipe coated with a syntactic poly-
olefin composition, c h a r a c t e r i s e d in that
the pipe is coated with a composition according to any
one of claims 1-15.

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